



## Patent Abstracts of Japan

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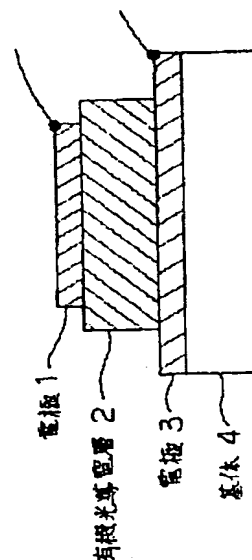
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TITLE : ORGANIC SOLAR CELL



ABSTRACT : PURPOSE: To obtain high efficiency of photoelectric conversion in a wide range of wavelength, by a method wherein, in a layer containing two or more kinds of organic pigment and organic dye having different spectral characteristics and work functions, a photoconductive layer in which the work function of the organic pigment is large as compared with that of the organic dye is used.

CONSTITUTION: A glass plate is used as a substratum 4, on which a semitransparent aluminum conducting layer (500 $\text{\AA}$ ) is formed as a facing electrode 3 by a vacuum evaporation method. By a spin coating method, 5% methanol solution of polyamide resin is spread and an under coat layer is formed. Next, 5 pts.wt. of trisazo pigment, 5 pts.wt. of diazo pigment and 7 pts.wt. of hydrazone compound are mixed as the charge transfer dye, and applied to the under coat layer, thereby obtaining an organic photoconducting layer 2. A gold electrode 1 is subjected to vapor deposition by vacuum sputtering. In this case, it is necessary that the work function of at least out of organic pigments is larger than that of at least one organic dye by 0.3eV or more, and the work function of one organic pigment is separated from the other by 0.2V or more.

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